

REMARKS

The present amendment and remarks are in response to the office action entered in the above-identified case and mailed on December 23, 2008. Claims 1-37 are pending in the application. Claims 15-37 were rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. Claims 1, 8-15, 20-26 and 32-37 were rejected under 35 U.S.C. §102(e) as being unpatentable over U.S. Patent No. 7,086,009 to Resnick, et al. (hereafter Resnick). Claims 2-7, 16-19 and 27-31 were rejected under 35 U.S.C. §103 as being unpatentable over Resnick in view of U.S. Patent No. 5,485,600 to Joseph et al. (hereafter Joseph). With respect to the rejections under 35 U.S.C. §101, Applicants have amended independent claims 15 and 26 to more clearly claim an invention that falls within the four statutory categories of patentable subject matter. With respect to the rejections under 35 U.S.C. §102(e) and 35 U.S.C. §103, Applicants respectfully traverse.

Rejections Under 35 U.S.C. §101

Claim 15, as amended, now calls for a computer readable medium on which a graphic display editor for use in a process plant to create a graphical display that represents the operation of one or more entities within the process plant is stored. The Patent Office has recognized that when functional descriptive material is recorded on some computer readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. (See, Interem Guidelines FDR Examination of Patent Applications for Patent Subject Matter Eligibility, Annex IV, O.G. Notices, 22 Nov. 2005). Therefore, claim 15 as amended, is now properly directed toward statutory subject matter.

Independent claim 26 has also been amended. Claim 26 now calls for a graphical display device. The graphical display device includes, among other things, a processor and a plurality of graphical objects adapted to be executed by the processor, and a graphical display object also adapted to be executed by the processor. The graphical display object includes the plurality of graphical objects wherein the graphical objects are interconnected together within the graphical display to form a visual representation of at least a portion of the process plant that may be displayed on the display device when the graphical display is executed by the processor. The graphical display device now called for in amended claim 26 comprises an article of manufacture which passes statutory muster under 35 U.S.C. §101.

Rejections Under 35 U.S.C. §102(e)

Claims 1, 8-15, 20-26 and 32-37 stand rejected as being unpatentable over Resnick under 35 U.S.C. §102(e). As mentioned above, Applicants respectfully traverse the rejection under 35 U.S.C. §102(e). It is well settled that a claim is anticipated under 35 U.S.C. §102 only if every element of the claim can be found in a single prior art reference. The rejected claims are not anticipated by Resnick because Resnick does not disclose each and every element of any of the claims pending in the present application.

Turning first to claim 1. Claim 1 calls for a display entity for use in presenting a visual depiction of a process entity of a process plant to a user on a display device. The display entity includes a display object. The display object includes, among other things, a graphic representation of the process entity adapted to be displayed to a user on a display device when the display object is executed on a processor. Resnick does not disclose a display entity that includes a display object having the features called for in claim 1.

Resnick describes a supervisory process control and manufacturing information application architecture. (Col. 5, lines 48-53). The disclosed supervisory process control and manufacturing information application includes an object hierarchy that frees high level application objects of design constraints associated with the computing system hardware on which the application objects reside. The hierarchy comprises a plurality of layers. Applications execute on an application layer. The applications are hosted by an engine object at a middle layer. The engine objects are hosted by a platform object that resides at the lowest of the three layers. (Col. 6, Lines 3-16).

According to the Examiner, Resnick teaches a display object stored on a computer readable medium at Col. 7, Lines 30-48. In fact, however, the cited passage teaches no such thing. Earlier, at Col. 7, Lines 8-10, Resnick describes an application model. The application model is a logical build of the plant relative to physical areas of a process plant and the equipment and functions within the physical areas. At Col. 7, Lines 30-48, Resnick describes a second type of system view, referred to as a Deployment Model. The Deployment Model enables a user to configure physical PCs and devices with regard to an application. The Deployment Model defines: PCs and engine types that run on the platforms, and external device integration. A user defines the areas that will run on particular engines, thereby determining where the particular application software will be physically executed. The system provides a configuration view of a Deployment Model showing the hierarchy with physical PCs and the areas and application objects running on the physical PCs. Nowhere does the cited passage teach a display object stored on a computer readable memory adapted to be executed on a processor. The various layers of the system hierarchy, e.g. application objects, engine objects and platforms do not comprise display objects, nor do the application

model or the deployment model. This last point is emphasized when one considers the characteristics of the display object called for in claim 1 of the present application.

According to claim 1, the display object comprises, among other things, a property memory adapted to store a value of a property associated with a process entity, and a graphic representation of the process entity adapted to be displayed to a user on a display device when the display object is executed on a processor. Again, these features are nowhere to be found in Resnick's disclosure. The Examiner points to Resnick Col. 11, Lines 29-67 as teaching a property memory adapted to store a value of a property associated with a process entity, and to Col. 12, Lines 5-11 as teaching a graphic representation of the process entity adapted to be displayed to a user on a display device when the display object is executed on a processor. Col. 11, Lines 29-67, however, describes the engine objects which host the application objects in Resnick's multi-tiered supervisory process control application environment hierarchy. At Col. 11, lines 57-67 Resnick describes how application objects carry out process control functions and/or information gathering functions. Further, a class of objects act upon data supplied by process control systems such as PLC systems via device integration objects. Note that nothing in Col. 11, Lines 29-67 describes any aspect of a display object, or a property memory associated with a display object. Resnick Col. 11, Lines 29-67 teaches engine objects, application objects and integration objects, some of which gather and/or operate on process control data received from process control systems, but no display objects.

Resnick Col. 12, Lines 5-11 similarly fails to disclose a display object that includes a graphic representation of a process object that is adapted to be displayed to a user on a display device when the display object is executed on a processor. Resnick Col. 11, Lines 5-

11 teaches an embodiment of an application object that includes an application interface that may be accessed by engine objects and schedulers. The engine objects access the application object interface to: initialize an application object; start up an application object; and shutdown an application object. The schedulers use the application object interface to initiate a scheduled execution of the application object. Nothing in the cited passage remotely relates to a display object that includes a graphical representation of a process entity adapted to be displayed to a user on a display device when the object is executed on a processor.

Because Resnick fails to disclose a display object stored on a computer readable memory and adapted to be executed on a processor, and which includes a property memory adapted to store a value of a property associated with the process entity, and a graphic representation of the process entity adapted to be displayed to a user on a display device when the display object is executed on a processor, Resnick does not anticipate claim 1 under 35 U.S.C. §102(e). Therefore, claim 1 and the claims depending therefrom should be allowed.

Independent claims 15 and 26 have features similar to those called for in claim 1. Claim 15 for example calls for a library of graphical objects adapted to be executed by a computer processor, each graphic object including a visual representation of a physical or a logical entity within a process plant. Claim 15 further calls for a property definition canvas routine adapted to enable a user to define a property associated with at least one of the plurality of graphic objects and a binding definition routine that enables a user to specify a binding between the property and a run-time environment within a process plant. The Examiner points to a base object editor 2034 (Fig. 20) disclosed by Resnick as teaching a property definition routine, and interface definitions 2002 as teaching a binding definition

routine. According to Resnick's disclosure, however, a base object editor 2034 provides standard editor pages common to all objects. Custom editor pages 2036 provide editor pages for customized portions of an object definition. (Col. 32, Lines 12-16). Nothing in Resnick's disclosure describes an edit canvas routine that allows a user to define the manner in which one or more visual representations of graphic objects will be displayed on a display device to a user during execution of a graphic display.

The interface definitions 2002 are described at Resnick Col. 29, Lines 64-67. The set of interface definitions 2002 enable a single object to provide useful interaction with a variety of environments (e.g. editing validation, runtime, etc.). This description does not describe a binding definition routine that enables a user to specify a binding between a property associated with a graphic object and a runtime environment in a process plant. Since neither the property definition canvas routine nor the binding definition routine are disclosed by Resnick, independent claim 15 and the claims depending therefrom are not anticipated under 35 U.S.C. §102(e) and should be allowed.

Independent claim 26 likewise calls for a plurality of graphic objects adapted to be executed by a processor. Claim 26 further calls for a property memory adapted to store a value for a property associated with at least one of the plurality of graphic objects. As has already been described, Resnick does not disclose these features. Accordingly, Resnick does not anticipate claim 26 under 35 U.S.C. §102(e) and claim 26 and the claims depending therefrom should be allowed.

Rejections Under 35 U.S.C. §103

Claims 2-7, 16-19 and 27-31 stand rejected under 35 U.S.C. §103 over the teaching of Resnick in view of Joseph. However, as has been described, Resnick fails to disclose a number of features of independent claims 1, 15 and 26. Claims 2-7, 16-19 and 27-31 are all dependent claims. Joseph is cited as teaching various additional limitations of the dependent claims. Joseph, however, fails to remedy the defects of Resnick with respect to the independent claims. Even if there were reasons for one of ordinary skill in the art to combine the teaching of Joseph with that of Resnick, the resulting combination would nonetheless fail to disclose all of the features of the broad independent claims. Therefore, the narrower dependent claims must be allowable as well. Therefore, claims 2-7, 16-19 and 27-31 are not unpatentable under 35 U.S.C. §103 and should be allowed.

CONCLUSION

For the foregoing reasons, Applicants respectfully submit that all of the claims pending in the application are now in condition for allowance. If the Examiner has any questions regarding the present response he is encouraged to call the Applicant's attorney at the number provided below.

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Respectfully submitted,

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